UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/615,574	07/13/2000	Jeremy Wertheimer	09765-015001	4957

26161 7590 04/12/2005

FISH & RICHARDSON PC
225 FRANKLIN ST
BOSTON, MA 02110

EXAMINER	
ROBINSON BOYCE, AKIBA K	
ART UNIT	**PAPER NUMBER**
3639	

DATE MAILED: 04/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/615,574	WERTHEIMER ET AL.	
	Examiner	Art Unit	
	Akiba K Robinson-Boyce	3639	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 January 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30 and 32* is/are pending in the application.

4a) Of the above claim(s) *31* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Status of Claims

1. Due to communications filed 1/10/05, the following is a non-final office action. Claims1-30 and 32 are currently pending in this application and have been examined on the merits. The previous office action has been withdrawn and the following reflects the claims as amended.

Claim Objections

2. Claim 21 is objected to because of the following informalities: Grammatical errors. In line 4 of claim 21, "produce an potential" should be replaced by "produce a potential". Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-30 and 32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "competitive flight" in claims 1 and 21 is a relative terms that renders the claims indefinite. The term " competitive flight" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the

invention. Because the term " competitive flight" is used, both claims 1, 21, the claims that depend from them (claims 2-20, 22-30 and 32), and the scope of the invention unclear.

The term "potential answer" in claim 1 is a relative term that renders the claim indefinite. The term " potential answer" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Because the term " potential answer" is used, claims 1, the claims that depend from it (claims 2-20), and the scope of the invention unclear.

The term "potential, actual availability response" in claim 21 is a relative term that renders the claim indefinite. The term "potential, actual availability response" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Because the term "potential, actual availability response" is used, claim 21, the claims that depend from it, (claims 22-30 and 32), and the scope of the invention unclear. The examiner is interpreting the response as an actual response.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-11, and 16-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dilks et al (US 3,622,995), in further view of Walker et al (US 6,112,185).

As per claims 1, 17, 21, Dilks et al discloses:

An availability predictor that predicts seating availability on a...flight/receiving by the computer system a request for availability of seating on an airline flight and executing in the computer system...to predict the seating availability on a competitive flight, predict seating availability on a competitor's flight that is a competitive flight to the flight, (Col. 10, lines 20-22, means responsive to a request for a reservation for identifying reservation information for an accommodation through a code, where it is shown that an accommodation is an available seat on a flight in col. 12, lines 65-67, Col. 10, lines 23-26, providing reservation information in response to a request for a future accommodation or reservation).

An availability system that produces an actual availability response for a flight/receiving by the computer system an actual availability response for a flight/produce a potential, actual availability response for a flight,(col. 10, lines 17-19, providing information about actual reservations for accommodations stored in the system);

A computing system...that compares the predicted answer from the availability predictor and the potential answer from the availability system to establish a decision with respect to actual availability system to establish a decision with respect to actual

availability/comparing the predicted answer from the availability predictor and the potential answer from the availability system to establish a decision with respect to actual availability/compare the predicted answer and the potential, actual availability response to establish an actual seat availability answer/send the actual seat availability answer, (Col. 9, lines 26-33, shows system is logic-controlled, w/ Col. 10,lines 26-28, comparing reservation code with stored reservations, where granting the reserved accommodation represents the decision).

Dilks et al doesn't specifically disclose that the flights are competitive, but does disclose a system for storing a plurality of different numbered reservations for accommodations in Col. 3, lines 71-73.

However, Walker et al discloses:

Competitive flights, (col. 8, lines 22-25, discussion of competitors). Walker et al discloses this limitation in an analogous art for the purpose of showing that different offer rules apply to airlines according to the effect that competitors have on those airlines.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to incorporate competitive flights into an availability prediction system with the motivation of showing that flights may or may not be available based on flights that competitors have to offer.

As per claims 2, 18, 22, Dilks et al discloses:

wherein the decision of the decision logic is a bias that determines whether the potential answer should be modified based upon the relative competitive position of

the competitor represented by the availability predictor/wherein comparing produces a decision that is a bias that determined whether the potential answer should be modified based upon the relative competitive position of the competitor represented by the availability predictor, (col. 9, lines 57-64, reservation change, where bias is represented by whether a new accommodation is available)

As per claims 3, 19, 23, Dilks et al discloses:

Modify/modifying the actual availability answer in accordance with the bias from the decision logic to modify the actual availability answer in accordance with the bias, (col. 9, lines 65-67, printing a ticket change notice).

As per claim 5, Dilks et al discloses:

Wherein the decision as to an actual availability answer is based on the decision from the decision logic, (col. 9,lines 31-33, logic-controlled system).

As per claims 6, 25, Dilks et al discloses:

Wherein the decision from the decision logic can have a plurality of states (Col. 9, lines 32-39, deciding whether or not available, shows advisory of a different selection).

As per claims 7, 26, Dilks et al discloses:

Wherein one of the states includes a neutral state that is does not tend to modify the potential answer received from the availability system (Col. 10, lines 7-9, if reservation is not confirmed or guaranteed, system refers passenger to an agent).

As per claims 8, 27, Dilks et al discloses:

Wherein one of states biases a potential answer towards answering that seat is

available (Col. 9, lines 34-37, shows whether or not, indicating if the accommodation is available);

As per claims 9, 28, Dilks et al discloses:

Wherein one of states biases a potential answer towards answering that seat is not available, (Col. 9, lines 34-37, shows whether or not indicating that the accommodation is not available)

As per claim 16, Dilks et al discloses:

Wherein the messages that are returned change the availability message from the availability system (col. 9,lines 37-39, each available flight is displayed once accommodations are available).

7. Claims 4, 10, 11, 20, 24, and 29 are rejected under 35 U.S.C. 103(a) as being obvious over Dilks et al (US 3,622,995), in further view of Walker (US 6,112,185).

As per claims 4, 10, 11, 20, 24 and 29, Dilks et al fails to disclose wherein the decision logic determines whether the prediction from the availability predictor indicates that a competitor is in a more favorable or less favorable competitive position than the answer produced by the availability system/wherein state depends upon the relative competitive position of the competitor represented by the availability predictor/wherein the decision logic determines whether the competitor's available booking codes are at a lower price than those that the availability system indicates the user of the system can offer, but does disclose a reservation system having means for storing a plurality of different numbered reservations for accommodations to be provided in col. 3, lines 70-73.

However, Walker et al '185 discloses:

wherein the decision logic determines whether the prediction from the availability predictor indicates that a competitor is in a more favorable or less favorable competitive position than the answer produced by the availability system/wherein state depends upon the relative competitive position of the competitor represented by the availability predictor/wherein the decision logic determines whether the competitor's available booking codes are at a lower price than those that the availability system indicates the user of the system can offer, (Col. 8, lines 22-25, offer rules show price flexibility for a competitor and shows that this flexibility can have an effect on the customers choice of airline). Walker et al '185 discloses this limitation in an analogous art for the purpose of showing that price flexibility has an effect on a customer's decision for an airline competitor.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to determine whether the prediction from the availability predictor indicates that a competitor is in a more favorable or less favorable competitive position than the answer produced by the availability system or, wherein state depends upon the relative competitive position of the competitor represented by the availability predictor or wherein the decision logic determines whether the competitor's available booking codes are at a lower price than those that the availability system indicates the user of the system can offer, with the motivation of indicating the level of competition that exists.

8. Claims 12, 13, and 30 are rejected under 35 U.S.C. 103(a) as being obvious

over Dilks et al (US 3,622,995), in further view of Walker (US 6,112,185), and in further view of Lynch et al (US 6,119,094).

As per claims 12, 13, neither Dilks et al nor Walker '185 disclose wherein if the competitor's available booking codes are not at a lower price, then the system can return a bias towards making the seat unavailable/wherein if the competitor's available booking codes are not at a lower price, then the system can test whether an original query was for a low cost fare and return a bias towards making the seat not available if the original query was for a low fare, but Dilks et al does disclose a reservation system having means for storing a plurality of different numbered reservations for accommodations to be provided in col. 3, lines 70-73.

However, Lynch '094 discloses:

Wherein if the competitor's available booking codes are not at a lower price, then the system can return a bias towards making the seat unavailable/wherein if the competitor's available booking codes are not at a lower price, then the system can test whether an original query was for a low cost fare and return a bias towards making the seat not available if the original query was for a low fare, (Col. 8, lines 27-32, [identifying within fare class restrictions]). Lynch '094 discloses this limitation in an analogous art for the purpose of identifying alternate low-cost travel arrangements.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to return a bias towards making a seat unavailable if the booking codes are not at a lower price with the motivation of not going outside of a price range and subjecting the customer to unnecessary costs.

As per claim 30, neither Dilks et al nor Walker '185 disclose wherein if the competitor's available booking codes are not at a lower price, then the instructions return a bias towards making the seat unavailable, but Dilks et al does disclose a reservation system having means for storing a plurality of different numbered reservations for accommodations to be provided in col. 3, lines 70-73.

However, Lynch '094 discloses:

wherein if the competitor's available booking codes are not at a lower price, then the instructions return a bias towards making the seat unavailable, (Col. 8, lines 27-32, [identifying within fare class restrictions]). Lynch '094 discloses this limitation in an analogous art for the purpose of identifying alternate low-cost travel arrangements.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to return a bias towards making a seat unavailable if the booking codes are not at a lower price with the motivation of not going outside of a price range and subjecting the customer to unnecessary costs.

9. Claims 14, 15, and 32 are rejected under 35 U.S.C. 103(a) as being obvious over Dilks et al (US 3,622,995), in further view of Walker (US 6,112,185), and in further view of Walker et al (US 5,897,620).

As per claims 14, 15, 32, neither Dilks et al nor Walker '185 disclose wherein if the competitor's available booking codes are at a lower price than those being offered by the user of the system, the system returns a bias towards making the seat available/wherein if the competitor's available booking codes are at a lower price than those being offered by the user of the system, the system determines whether the

query was for a high cost fare, and returns a bias towards making the seat available if for a high cost fare, but Dilks et al does disclose a reservation system having means for storing a plurality of different numbered reservations for accommodations to be provided in col. 3, lines 70-73.

However, Walker et al '620 discloses:

wherein if the competitor's available booking codes are at a lower price than those being offered by the user of the system, the system returns a bias towards making the seat available/wherein if the competitor's available booking codes are at a lower price than those being offered by the user of the system, the system determines whether the query was for a high cost fare, and returns a bias towards making the seat available if for a high cost fare, (col. 9, lines 18-22, [correcting for competitor forces by increasing inventory {seats available}]). Walker et al '620 discloses this limitation in an analogous art for the purpose of showing that seats can be accommodated by adjusting the fare through a special fare listing).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention that if the competitor's available booking codes are at a lower price than those being offered by the user of the system, the system returns a bias towards making the seat available/wherein if the competitor's available booking codes are at a lower price than those being offered by the user of the system, the system determines whether the query was for a high cost fare, and returns a bias towards making the seat available if for a high cost fare with the motivation of showing that seat availability can be accommodated accordingly.

Response to Arguments

10. Applicant's arguments with respect to claims 1-30 and 32 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Akiba K Robinson-Boyce whose telephone number is 571-272-6734. The examiner can normally be reached on Monday-Tuesday 8:30am-5pm, and Wednesday, 8:30 am-12:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss can be reached on 571-272-6812. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7238 [After final communications, labeled "Box AF"], 703-746-7239 [Official Communications], and 703-746-7150 [Informal/Draft Communications, labeled "PROPOSED" or "DRAFT"].

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

akb

A. R. B.
April 6, 2005

THOMAS A. DIXON
PRIMARY EXAMINER